AMENDMENTS TO THE CLAIMS

Please amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1-63 (cancelled)

64. (Currently Amended) A process for producing a long-term culture of immature dendritic cells, ~~which process comprises~~ comprising:

(i) ~~providing a population of embryonic stem cells;(ii)~~ culturing ~~the~~ an embryonic stem cell[s] in the presence of a ~~cytokine or combination of cytokines~~ composition comprising a cytokine, which bring about differentiation of [the] said embryonic stem cell[s] into an immature dendritic cell[s] ~~whose protracted longevity and capacity for self renewal produce a long-term culture of immature dendritic cells~~; and ~~(iii)~~

(ii) recovering said immature dendritic cell[s] from [the] said culture, [which] wherein said immature dendritic cell[s are] is capable of maturing ~~maturation~~ [to] into an immunostimulatory phenotype cell.

65 - 67 (Cancelled)

68. (currently amended) The process according to claim 64, wherein said composition ~~the cytokine or combination of cytokines is or includes~~ further comprises IL-3.

69. (currently amended) The process according to claim 68, wherein said composition further comprises ~~a combination of cytokines including IL-3 and~~ GM-CSF ~~is used~~.

70. (currently amended) The process according to claim 64, wherein [the] said embryonic stem cell[s] in (i) [are] is in the form of embryoid bodies, generated by culturing purified embryonic stem cells in suspension for 14 days in the absence of recombinant leukemia inhibitory factor.

71. (currently amended) The process according to claim 64, wherein [the] said embryonic stem cell[s] (ES) [are] is genetically modified.

72. (Previously presented) The process of claim 71, wherein the cell[s] expresses ~~express~~ one or more heterologous gene(s).

73. (Previously presented) The process of claim 72, wherein the heterologous gene (s) encode a protein which has an immunomodulatory effect.

74. (Previously presented) The process of claim 73, wherein the protein is a cell surface receptor.

75. (Previously presented) The process of claim 74, wherein the protein is Fas-ligand.

76. (Previously presented) The process of claim 72, wherein the gene(s) express a dominant negative form of an endogenous protein.

77. (Previously presented) The process of claim 73, wherein the protein is an antigen target for the immune system, such as an autoantigen, a tumour antigen, or a foreign antigen.

78. (Previously presented) The process of claim 64, wherein the cell co-expresses two or more heterologous genes.

79. (Previously presented) The process of claim 78, wherein one of the heterologous genes prolongs the life-span of the cell.

80. (Previously presented) The process of claim 79, wherein the gene is an anti-apoptotic gene.

81. (Previously presented) The process of claim 78 or 79, wherein the gene encodes FLIP or bcl-2

82. (Previously presented) The process of claim 64, wherein ~~in which~~ one or more endogenous gene (s)have been inactivated.

83. (currently amended) The process of claim 82, wherein the inactivated endogenous gene (s) are ~~comprise any of~~: B7-1, IL-12, [the] p35 subunit of IL-12 or p40 subunit of IL-12.

84. (Currently amended) The process of claim 71, wherein [the] said embryonic stem cell[s] is [are] transfected with ~~at least one~~ a gene, which is expressed in the dendritic cell[s].

85. (Curreny amneded) The process of claim 84, wherein the gene is under the control of a promoter which initiates ~~or upregulates~~ gene expression on maturation of the dendritic cell[s].

86. (Currently amended) The process of any one of claims 84, 85 or ~~claim 85~~ 111, wherein the gene is a reporter gene which expresses a detectable product in the dendritic cell[s].

87. (Previously presented) The process of claim 86, wherein the gene encodes a fluorescent product.

88. (Previously presented) The process of claim 87, wherein the gene is the GFP gene

89. (Currently amended) The process of claim 71, wherein the ES cell[s] is [are] genetically modified so as to inactivate ~~at least one~~ a copy of ~~at least one~~ a gene.

90. (Currently amended) The process of claim 64, wherein the recovered immature dendritic cell[s] is [are] substantially pure.

91. (Currently amended) The process of claim 64, wherein the cell[s] is [are] a lymphoid dendritic cell.

92. (Currently Amended) The process of claim 64, wherein the cell[s] is [are] a myeloid dendritic cell.

93. (Currently amended) The process of claim 64, wherein the cell[s] is [are] a human dendritic cell.

94. (Currently Amended) The process of claim 64, wherein the ES cell[s] is [are] derived from a mouse strain such as CBA/Ca or C57BI/6.

95. (Currently amended) The process of claim 64, wherein the ES cell[s] is [are] from [the] an ESF116 cell line.

96 through to 104 (Cancelled).

105. (Previously presented) The process of claim 79, wherein the gene encodes FLIP or bcl-2.

106. (Previously presented) The process of claim 85, wherein the gene is a reporter gene which expresses detectable product in the dendritic cells.

107. (Previously presented) The process of claim 106, wherein the gene encodes a fluorescent product.

108. (Previously presented) The process of claim 107, wherein the gene is the GFP gene.

109. (Cancelled).

110. (New) The method of claim 64, wherein said composition further comprises GM-CSF

111. (New) The process of claim 84, wherein the gene is under the control of a promoter which upregulates gene expression on maturation of the dendritic cell.